

Field  
Records

Te Vega - C. A.

J. ROSEWATER

Symbol - Mo.

(Mollusca)

7530-222-3521  
FEDERAL SUPPLY SERVICE  
(GPO)



write section for I PM - describing  
radiation in Tridacnidae - il: form  
& function vs. evolution and ecology -  
reduction in <sup>byssal</sup> adductor of crocea correlate with  
life in coral pocket - etc.

Joseph Rosewater  
U.S. National Museum  
Washington, D.C.  
Division of Mollusks

Ken:

8/5/64

Have you seen Charles Hedley's  
drawing of living Solecardia  
cryptozorca Hed - ?

1917 Proc. Linn Soc N.S.W. for  
1916 vol 41, pt 4, pl. 46 fig 1.  
[ looks like "my" Erycinid from  
IIDE ]

see MO-15 for Tridacna & other  
bivalve for testing.

see MO-28 for "Gastropod bivalve" -  
see back of book for sketch  
of Neobornia group



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see mo-28 for "Gastropod bivalve" -  
see back of book for sketch  
of Nassarius group



tiona l

Dec, 1963



## Field Records

Te Vega Cruise "A" - International  
Indian Ocean Expedition

Singapore - Colombo, Ceylon - Oct - Dec, 1963

Symbol "MO"



MO-1 October 12, 1963 - Kampong Hoyang,  
Northeast Singapore - Littorina and Nerita  
from sea wall at home of David Everett.  
Achatina fulica and other land snail from  
ground along garden path. Rutzler, D. + B.  
Everett, J. Rosewater! [Te Vega Sta. No. 62]  
Lat  $1^{\circ}22'N$  Long  $103^{\circ}57'E$  H03750

MO-2 October 15, 1963 - Sekudu Island,  
Strait of Johore, Malaysia - northeast across  
strait from Kampong Hoyang<sup>(=Molegan village)</sup> (near Changi) -  
0-3 ft., sand silt, soft coral, sponge, Halimeda,  
Pirina, Voluta nobilis (not taken - found by native boys +  
given to Mrs. Everett - young - taken with sticks in  
shallow water), Murex, Turbo, Littorina<sup>+Nerita</sup> from  
rocks on Island out of water; Littorina "carinitera"  
from mangrove trees. [Te Vega Sta. No. 63]  
Lat  ~~$1^{\circ}23'N$~~   $1^{\circ}24'N$  Long  $103^{\circ}59'E$  H03750

MO-3 October 16, 1963 - northeast coast - East  
St. John's Id. - south coast of Singapore, rising  
tide - 0-6', sand, some silt, rock, dead  
coral, dead conus, Lyrene, oysters, Mitra..  
[Te Vega station No. 64]  
Lat  $1^{\circ}13'N$ ,  $103^{\circ}51'E$  ~~H03750~~  
H02670



Lat.  $10^{\circ} 10' N$  - Long  $103^{\circ} 45' E$  HO 1205

MO-4 - Pulau Hantu <sup>southwest</sup> - Singapore - southwest  
of Keppel Harbor, near P. Bukum ("shell  
oil Id.") October 18, 1963. Low tide 5:20 P.M.  
1.6' - sand soft and hard coral, sponges, Sargassum,  
large "reef" uncovered or shallow water at low tide, <sup>boat grounded.</sup>  
Pinna, Atrina, Lambis, Cypraea, Angaria, Lima;  
Mangrove swamp with Terebralia; Littorina undulata  
+ L. scabra on mangrove branches; Planaxis on  
roots; also Rhinoclausis in sand. Collectors:  
Rosewater, Kohn, Rutzler, Colinvaux, Mrs. Everett, Bud  
Barrett and students! Boat freed from reef by  
incoming tide - return begun at about 8:30 -  
arrived Te Vega about 10:00 P.M.!! Good spot -  
Conus consors coming out of sand at twilight -  
seven specimens collected by and for A.T. Kohn,  
[Te Vega Sta. 65]

N.W. St. John's Id.  
MO-5 P. Tekukor - Singapore - Oct 20, 1963  
Tridacna squamosa <sup>Tan striped mantle</sup> - and general  
collection - Rosewater, Rutzler, Kohn,  
Johnson <sup>shore</sup> - Coral reef flat, nearly  
low tide - flourishing coral heads  
and abundant rubble, Diadema -  
<sup>Crinoids</sup> 3-6' - sharp drop off at edge  
of reef. (Hired boat \$25.00) <sup>making</sup>  
[Te Vega Sta 66]

MO5 - Coord. Lat  $10^{\circ} 13' 50'' N$

Long  $103^{\circ} 50' E$

HO 2670



MO-6 Pulau Anyut, Malacca Strait,  
just southeast of town of Malacca.

Lat  $2^{\circ} 4' 46''$  North, Long.  $102^{\circ} 18' 15''$  E, Oct. 26, 1963

Shore and reef, water turbulent, silty;  
rocky-shore, huge boulders, very poor visibility,  
a few rocky-shore gastropods - *Thaids*, *Littorina*,  
*Trochus*, *Turbo*, oysters, leeward corner of  
Id. very clear. Reef narrow, dropping rapidly  
off to deeper water. Kohn, Rat 21er, Rosewater,  
Barrett, Bronson, DeSalvo. [Te Vega Sta. 67]

HO 3745

MO-7 Pulau Besar, Malacca Strait, just  
southeast of town of Malacca, Lat  $2^{\circ}$

$6' 45''$  N, Long.  $102^{\circ} 19' 45''$  E, <sup>Oct 26, 1963</sup> Beach on  
west side of Island - water very turbid -  
moderate wave action, sand inshore -

turning to grey silty mud at about 6-10'.  
"*Astraea*" *Littorina*, *Amphidesma*, hermit crab  
shells, Rolf Boling, Senior Scientist & students!

[Te Vega Sta. 68]

HO 3745



MO-8 Cape Rachando, <sup>Malaysia</sup> Straits  
of Malacca lat  $2^{\circ} 24' N$ .

Long  $101^{\circ} 51' E$  October 27, 1963.

Beach Reef and adjacent mangrove  
area. Note "spiny oysters" and (*Pembicium*)  
or *Peasiella* in jar vial. *Littorina* and  
*Planaxis* from mangrove trunks and leaves  
also mangrove oysters. *Murex* from reef  
water again turbulent, silty - only partially  
clear in areas. Kohn, Rosewater!

HO 3745

[Te Vega Sta. 69]

Lat  $2^{\circ} 59' N$ .

Long  $101^{\circ} 23' E$

<sup>Malaysia</sup>

MO-9 Port Swettenham - Northeast corner

Pulau Lumut - mangrove swamp. October 29,

1963. *Littorina melanostoma* on mangrove  
trunks, *L. carinifera* on leaves, *L. scabra*

(young?) on trunks, *Terebralia*, *Paludina* (?)

*Pithia*? small (very) Ellipsoid + *Pithia*? *Nerita*,

1-*Telescopium*.

[Te Vega Sta. 70]

HO 3742 [3743?]



MO-10 Pulau Jarak, [Malaysia]  
Lat.  $3^{\circ}59'N$ , Long.  $100^{\circ}6'E$  - due west  
of Simbilan Ids. and mouth of Perak  
River. Highest elevation 508', granitic  
boulder shore - Mollusk collection at  
eastern end of Id. - coral, boulders, some  
sand - moderate wave action. *Vasum*, *Thaids*,  
*Barbatia* in pockets in coral heads, *Cypraea*,  
*Littorinids* on boulders above water, also  
*Chiton* - 3 *Cones* - taken for A.J. Kohn

October 30, 1963 - HO 3120 - (Tevega Sta 71)

[*Lambis* \_\_\_\_\_ and *Turbo marmorata*  
taken by R. Bolin and assistants at fish station  
contiguous but east of MO-10]

Collectors. A.J. Kohn, K. Rutzler, L. Colinvaux, J. Rosewater  
and students.

MO-11 Lat  $4^{\circ}07'N$  Long  $100^{\circ}00'E$  - 1400 -  
1430 hrs. (Tevega Sta 73) Dredge Haul  
in 37 - 37 fms. 6 ft Beam Trawl - HO 3120  
Haul consisted mainly of sponges and varied  
*alcyonarians*. One *Turris*, *Chama*, *area*,



MO-12 Pulau Perak - <sup>Lat</sup>  $5^{\circ}41'N$  <sup>Long</sup>  $98^{\circ}56'E$   
October 31, 1963 - 0830 - 1030 hrs. HO-3120

Rocky Mound - 308' high. narrow shelf -  
then dropping rapidly off. Bird sanctuary -  
no vegetation - predominantly Brown Booby -  
few Thais - rock oysters taken  
snorkling - [Te Vega Sta No. 74]  
Fish Poison station - some swell, but  
mainly calm.

MO-13 <sup>Lat</sup>  $5^{\circ}48'N$  <sup>Long</sup>  $99^{\circ}50'E$  - 31 Oct, 1963 <sup>HO 3120?</sup>

Dredged Haul in 53-55 fathom -  
Green Clay - 6 ft Beam trawl - Sandy  
mud with many pteropod shells.

Turris, Nassarius, Biplex, scaphopods.  
Many empty mollusc shells - Conus -  
praececellens alive taken by Alan Kohn;  
also C. sulcatus + C. vimineus Rue.  
[Te Vega Sta. No. 75]



MO-14 Laem Phan-Pha, near Phuket  
 Thailand - November 2, 1963 - 0630 -  
 0830 [Te Vega Sta. 76] Lat  $7^{\circ}52'N$ .  
 Long.  $98^{\circ}26'E$  - HO 3726  
 Molluscs collected around Phan  
 Pha "Point." Thais, *Siphonaria littorina*  
 spp. *Cypraea*, *Cymatium*, *Melampus*.  
 Kohn + Rosewater. (+ *Umbonium*  
 in mud-sand.  
 by Disalvo + Bronson,  
 Gislén

Nov. 3, 1963

MO-15, Goh-Huyong, Similan Islands,  
 Thailand Lat  $8^{\circ}28'50"N$ , —  
 Long.  $97^{\circ}39'00"E$  - Admiralty 3052.  
 Reef area NE side of Goh Huyong.  
 Steep Beach of poorly sorted calcareous  
 sand. Considerable surf - coral reef  
 just off Beach - coral heads and fragments  
 Lambris, *Tridacna maxima*, *Trochus*, *Nerita* -  
 hand shells taken on Island vegetation.  
 Collection made in morning and late  
 afternoon - coinciding nearly with -  
 day's low tides [Te Vega Sta No. 77]

\* *Tridacna* + other bivalve - for testing  
 shells.



MO-16 6' Beam trawl - 70 f m -  
start 1815 end 1840 67 f m.  
Lat  $8^{\circ}46'N$ .  $97^{\circ}46'E$  East. Nov. 4, 1963.  
Misc. Dead shells, few living - 2 species  
of Conus [Te Vega Sta No. 80]

MO-17- November 5, 1963  
Goh Sindarav Nua (Chance Id.)  
Thailand. Lat  $9^{\circ}25'30"N$ . Long  $97^{\circ}54'00"E$   
Admiralty 3052 Tide low, ca. +2.5' at ca. 1700  
Reef area fringing northeast side of  
large bay on Goh Sindarav Nua, near its  
mouth. Much living and dead coral;  
*Tridacna maxima*, *crocea*, common, some  
*T. squamosa*. Inshore portion with much  
medium fine (?) sand, some flat reef  
limestone covered with thin layer of sand.  
Offshore portion (to ca - 2.5' level)  
mainly hard substrate - coral heads, and  
(dead coral) limestone with some sections  
paved with Acropora rubble in large  
pieces. At greater depths increasing  
proportion of sand with scattered coral  
heads. [Te Vega Sta No. 82]



Thailand.

MO-17a Goh Sindaran Nua - <sup>west</sup> Southeast  
side of deep bay - south side of  
island - beach and coral heads.  
November 6, 1963 7:00 - 9:00 A.M.  
Rising tide. Terebra, "Acanthochiton"  
(narrow plates). + land shells from hill  
above beach.

MO-17b. Reef at ~~Southeast~~ west point  
of island - lush coral reef - dropping  
suddenly into channel between islands  
many large Tridacna maxima - 12-13"  
in length - with variably colored mantle  
but lacking the brilliance of Marshall  
Island specimens. Fasciolaria taken  
by Jim Nybakken. Nov. 6, 1963 9:30 -  
10:30 AM

MO-17c Small dredge - short haul  
taken in 3 fathoms N. east side  
Goh Sindaran Nua. Few brachy (moll)  
and one Nassoid.

MO-17d - Mangrove swamps - at  
<sup>head</sup> deepest part of bay, <sup>south side</sup> Goh Sindaran Nua.  
Littorina and Nuxodonta on mangrove  
rocks; also rocks adjacent to mangrove  
: Thais, Merita, Nuxodonta, Turbo.  
Nov. 6, 1963.



lat  $9^{\circ}25'N$  long  $97^{\circ}52'E$   
MO-17 e Nov. 7, 1963 ~~South~~ East  
side Goh Sindarar Tai (Bay),  
10-15' - sand coral heads and  
Rubble - large *Tridacna squamosa*  
ca. 16" length - Kodachromes taken.


MO-18 Nov. 8, 1963 - Goh Similan,  
Similan Ids, Thailand. Admiralty 3052  
lat.  $8^{\circ}38'45''N$ . Long.  $97^{\circ}39'10''E$ .  
Beach and coral heads east side of Id.  
Considerable sandy areas, negligible wave  
action. 4-15' depth. *Terebra* and *Mitra*,  
from sand tracks; *Cypraea tigris* from  
bases of coral heads; anomalous or  
barely immature *Lambis chrysga* from  
beneath coral Rubble. [Te Vega sta No. 85]  
few Conus collected by and for A.J. Kohn.



MO-19 Nov. 9, 1963 Goh Phi Phi  
(Pipidon), Thailand ~~Lat.~~ <sup>Long.</sup>  $98^{\circ}48'E$   
~~Long.~~  $7^{\circ}40'N$ . Cove on Northwest  
side of Id. - Extensive calcareous  
sand beach - with coral rubble +  
evidence of dying reef - also fresh  
water emptying. Mid tide - water 0 -  
5' - rocks and mangrove swamp at  
edge. 1700 - 1800 hrs. [Te Vega Sta No  
- MO-19a + Rocks at <sup>mouth</sup> head of Bay Nov 1963

MO-20 Nov. 10, 1963 Pulau Tonga  
(or Ta Ngah), Butang Group,  
S. Thailand. Lat.  $6^{\circ}34'24"N$ ,  
Long.  $99^{\circ}27'36"E$  Admiralty chart 3942.  
Rather steep sandy beach. Inshore area of  
reef flat with sand substratum,  
isolated outcrops of reef limestone,  
few to many dead coral heads +  
boulders with some terrigenous boulders  
on sand and limestone. A rich area for  
mollusks. (see Vanikoro sp., "winjel" bivalve  
+ many other mollusks. 0845-1130; 1500-1700  
[Te Vega Sta No. 88])



MO 21 - Pulau Ular, Langkawi Islands,  
Malaysia lat  $6^{\circ}15'44''$  N.  
Long.  $99^{\circ}44'$  E. Nov. 14, 1963 - Small Island,  
"Humpbacked" (double hump)  - Sedimentary  
rock - medium coarse shell sand beach - 0830-0930  
hrs. Water turbid - raining - snails &  
bivalves from mangroves, rocks and water  
near beach - bag of shell sand taken  
for sorting later. [Te Vega Sta No. 89]

Nov. 17, 1963  
MO-22 - Airport Beach, Koh Phuket,  
Thailand - fringing reef off  
beach - rising tide, 0700 - 0930 A.M.  
water 4-6' - Conus, Turbo, Lambis  
Cypraea. Lat.  $8^{\circ}5'N$ . Long.  $98^{\circ}17.9'E$ .  
[Te Vega Sta. 90]

MO-23 - Nov. 17, 1963 S. side of Ao Pa  
Tong, Koh Phuket, Thailand H03760  
 $7^{\circ}53'15''N$   $98^{\circ}17'00''E$ . Fringing reef  
along S. shore of Ao Pa Tong, and  
adjacent sand beach. Narrow reef.  
Olivella from beach at low tide (trails) -  
Tridacna crocea, Fasciolaria, Turbo, etc  
from reef, Nerita from rocks on shore;  
fresh water stream entering. 2 large Sepia seen  
stationary. [Te Vega Sta. No. 91]



7°45'N 98°18'E

MO-24 Nov. 18, 1963 Ao Ra Wai,  
Goh Phuket, Thailand.

Fringing reef in bay. Porites lutea,  
Acropora sp. common. Proportion of  
sand substrate increases in offshore  
portion. Cypraea spp. common.

Kohn + Colinvaux! [Te Vega Sta 92]

MO-25 Nov. 20, 1963 [Te Vega Sta 93]

Pulo Boenta, off Aceh Head,  
North west Sumatra, Indonesia

Lat. 5°36'N. Long. 95°9'E. HO 3101

Fringing reef, low tide - off sandy  
beach - High island - coconut

plantation 1530 - 1730 hrs. Turbo, Conus,  
Mitra, Magilus (from coral), Fasciolaria,  
Cymatium, Cypraea, etc. Collections  
made from reefs and rocks on  
south and northeast side of island.

MO-26 Nov. 19 1963 Olehleh, west  
of Kota Raja, Northwest Sumatra.

Squid taken at night light at  
anchorage, surface. Bud Bartlett!

5°34'N 95°17'E. HO 1595 [Te Vega  
Sta. 96]



MO-27 - [Te Vega Sta No. 96]

Nov. 21, 1963 Time 1400-1800

Lat.  $03^{\circ}25'N$  Long  $95^{\circ}40'W$ . U.S.H.O. 1595

↓

Off southwest coast of Sumatra,  
about 50 miles from shore, depth  
1150 Meters. 6' Beam Trawl.

Amusium, Trochid, Cuvulidula,  
Polynices.

MO-28 [Te Vega Sta No. 97.

Nov. 22, 1963 0830-1030 hrs.

Pulo Penju, NE of Pulau Simalur,  
Sumatra, Indonesia Lat.  $2^{\circ}51'N$ ,  
Long  $95^{\circ}56'E$ . Fringing reef at  
north end of island - coral heads  
and rubble, gently sloping shore,  
water calm - 0-6'. Rich gastropod  
area (+ shells bought from natives  
Choronia, Ovula, Terebralia, Lambis)



BA 6152

MO-29 Pulau Melila. south of  
Udjung Batu, Banyak<sup>4</sup> Ids.  
off Sumatra, Indonesia

Lat.  $2^{\circ} 15' N.$ , Long ~~25~~  $97^{\circ} 25' E$

Wide reef extending N + S between  
(P.) Udjung Batu and Rangit Br.

Melila is not shown as Id., but present.  
Sandy with coral rubble and living coral.  
depth 0 - 6'; 1st appearance of Hippopus  
living; dead valves of Tridacna gigas;  
also living T. maxima + crocea. Rich

molluscan fauna - many cypraea, fasciolaria  
Terebra; immature marginellid + spotted  
cypraea with spotted shell and red  
mantle - 0830 - 1130 hrs Nov. 23, 1963

[Te Vega Sta 98] [1st news of Pres.  
Kennedy's death].

At this locality we were shot at  
(the ship) by Indonesian Police;  
said to be target practice!



MO-30 Nov. 24, 1963 [Tevega Sta. 99]  
Palo Nias, southwest of Sumatra,  
Indonesia., southeast coast of Island.  
Lat  $00^{\circ} 42' 51''$  N. Long.  $97^{\circ} 53'$  E  
mouth <sup>2.9</sup> of fresh-brackish tidal  
stream - Neritina, and on rocks  
along surf swept shore - beach  
of smooth, washed cobble - village  
at mouth of stream - natives  
most friendly and cooperative;  
head man and others visited ship.

MO-31 [Tevega Sta. 100] Nov. 24, 1963  
Time: 1550 - 1920 Lat.  $00^{\circ} 33'$  N  
Long.  $98^{\circ} 05'$  E 1403122  
SE of Pulau Nias, south of Sumatra  
Indonesia, Depth 600 M. Bottom  
Green Mud. 6 Foot Beam trawl  
1 spec Giant Lima, Fissurellid,  
"Crepidula", Amusium, several dead  
gastropods, Bachiopods on Alcyonarian.

see Lima (Acosta)  
niasensis Thiele 1918.  
Syn. Conch. Lib. (NF)  
7 (2a) Fossils  
m 23 pl 3, fig 3,  
pl 4, fig 12



MO-32 [Te Vega Sta 101] Nov. 25, 1963

1030-1215 Lat  $00^{\circ}01'45''$  S

$98^{\circ}31'15''$  E. H03122

Pulo Bai, Batu Group, off  
Sumatra, Indonesia. Extensive  
shallow coral reef off ~~South~~<sup>North</sup> end  
of island - much coral rubble +  
living coral. 1st living *T. gigas*  
collected in shallow water  $1\frac{1}{2}'$  -  
overall depth varying from 0-6' -  
sandy patches in reef yielded  
*Distorsio* \* *Terebra* + *Mitra*.  
also collected Nov. 26, 1963

Lat  $00^{\circ}02'S$ , Long  $98^{\circ}30'E$ .

MO-32a Nov. 26, 1963, 4:00 - 6:30 P.M.

E. side P. Masa west of P. Bai,  
Batu Group. Barrier Reef and  
sandy patches water 2-6'.



MO-33 Nov. 30, 1963 0830 - 1230  
lat  $01^{\circ}59'5''$ , long  $99^{\circ}35'E$  HO 3123  
[Te Vega Sta 103]

Pulau Siburn, N. of Sipora,  
southwest of Sumatra.

sandy shore, reef and mangrove  
fringe + freshwater stream on Island.

Thyca on starfish,  $29\frac{1}{4}$  (740 mm)  
Tridacna gigas (living in 12-15') Crystalline  
style preserved.

Repeats on Night of Nov. 30 + dredging  
in shallow water Dec 1, in A.M.

MO-34 Small Island on west shore  
of Veeckens Bay, south Pagi  
Island, sw of Sumatra. Dec 2, 1963  
0830 - 1230 AM. lat  $30^{\circ}14'20''S$   
Long.  $100^{\circ}25'50''E$ . sand + coral rubble  
shore of small island Acropora,  
+ Porites living with sandy bottom  
considerable surge. 0-8' HO 323  
[Te Vega 105]

Dec. 2, 1963 - sandy bottom  
MO-34A - Veeck Ken's Bay, east of South  
Pagi Id. - 15 minute dredge haul  
in 15 fathoms, 2' box dredge.

[Te Vega Sta 107] Many fine  
species.  $03^{\circ}14'S$ ,  $100^{\circ}26'E$  HO 3123  
2315 - 2330

Vanospira?

was abundance of  
dredged species due partly  
to fact that haul taken at night!



MO-35 Dec. 3, 1963 0930-1200 HO-3123  
Lat  $04^{\circ}01'S$  Long.  $101^{\circ}01'30"E$  [Te Vega Sta 106]

Mega, Mentawi Islands, Sumatra  
Reef on <sup>south</sup> west end of island -  
arched (concave) sandy beach - expansive  
reef which appears to have been  
raised (see also this at S. Pagi) + dries  
at low tide - has caused extensive  
death of coral reef - a few typical  
dead coral crevice species were  
present and although the site  
looks excellent it appears to be  
depauperate. 0-4'

MO-36 Dec. 4, 1963 Lat  $3^{\circ}27'S$   
Long  $100^{\circ}41'E$ . HO 3123 [Te Vega Sta 108]  
Reef fringing N. + N.W. side of  
Pulau Stupai, on northern edge  
of Sanding Island reef, Mentawai  
Islands. Wave swept reef pavement  
with frequent movable coral slabs.  
weak to moderate surge - abundant  
Conus, Cypraea, Vasum - Mitra in  
coral.



MO-37 Dec. 5, 1963 [Te Vega Sta. 111]  
South ~~west~~ east tip Sanding Island,  
Mentawai Ids, Indonesia  
Lat  $3^{\circ} 29' S$ , Long.  $100^{\circ} 41' E$ .  
Pavement of fringing reef between  
shore (sand beach) and surf -  
large quiet area - Mollusks - from  
beneath coral slabs and minutes  
from breaking coral

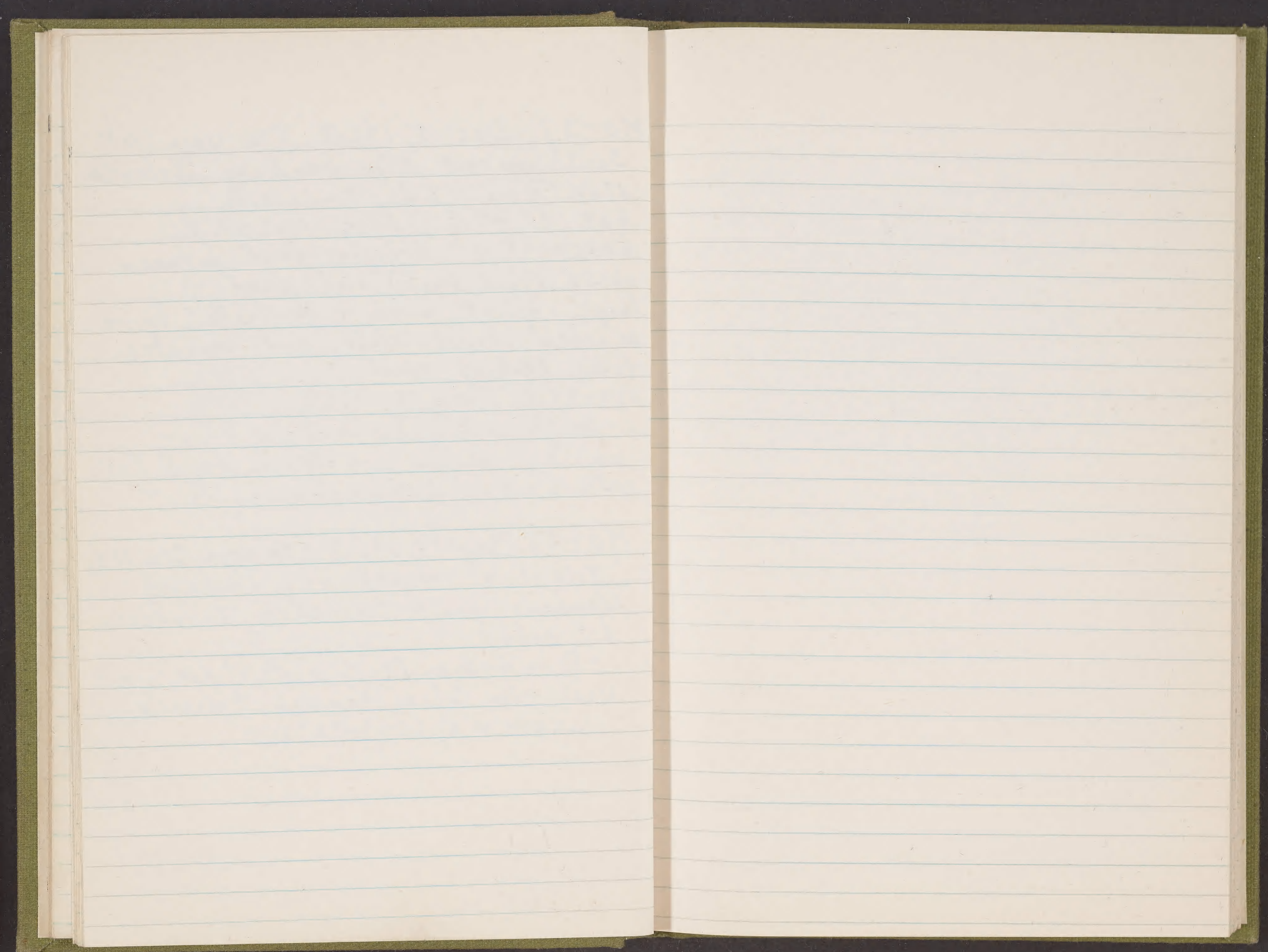
MO-37 A Dec. 7, 1963

South east side Sanding Id. -  
sandy beach and offshore sand flat:  
water 0 - 3' - Oliva, Nassarius, etc &

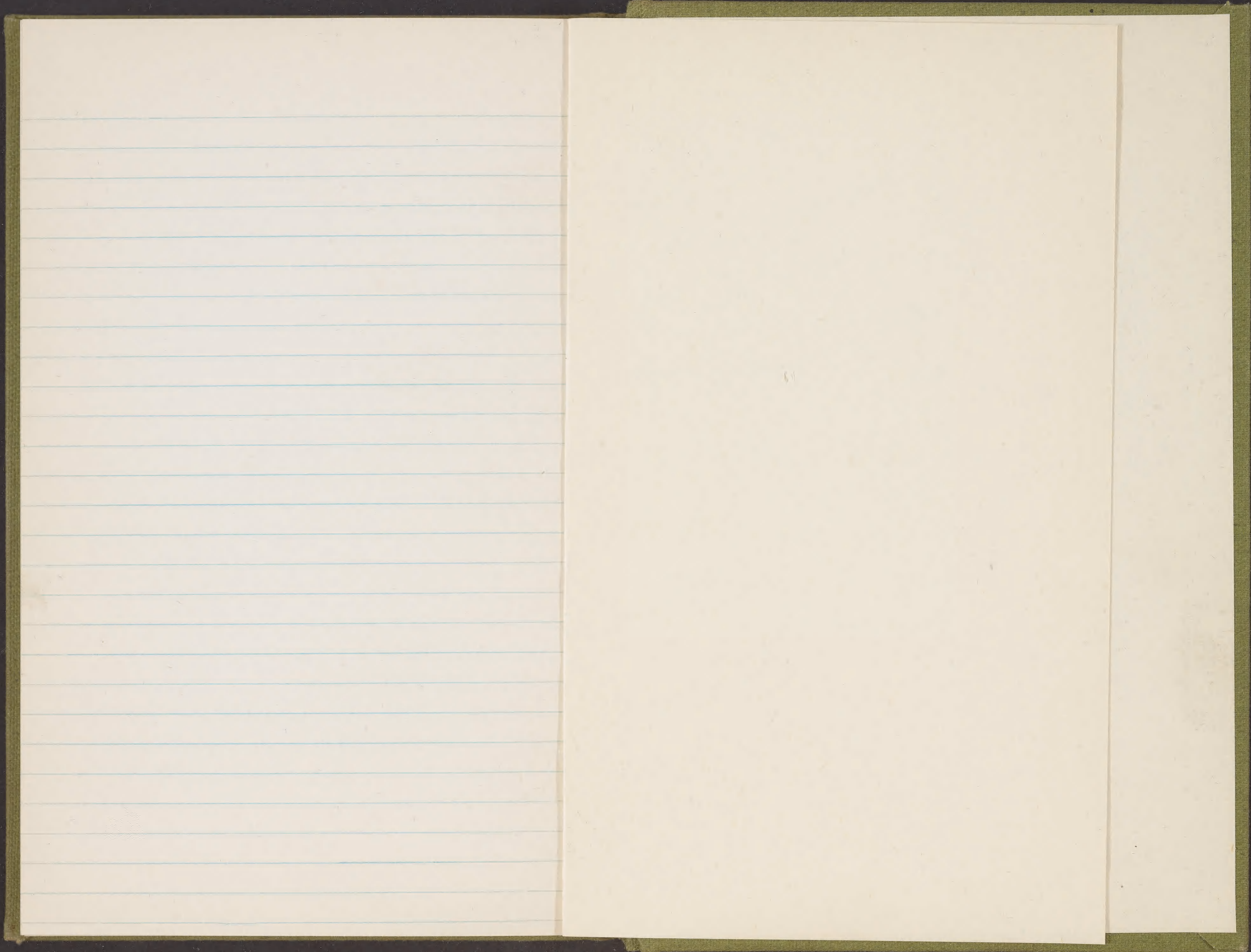
MO-38 Dec. 15, 1963 (Te Vega Sta 113)  
Island at mouth of Padang  
Harbour, South Sumatra, Indonesia  
A.J. Kohn!

= Pasir Gedang (Id.), mouth of Koninginne  
Baai, near Padang, Sumatra, Indonesia  
Lat  $01^{\circ} 01' 15'' S$ , Long  $100^{\circ} 21' 30'' E$





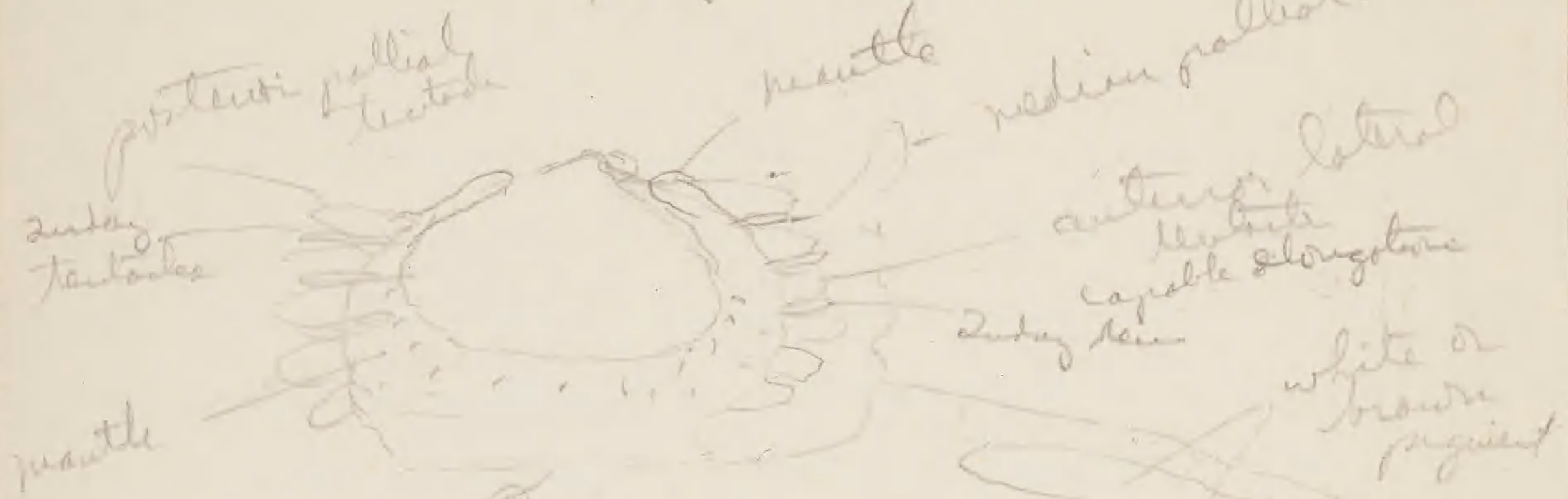






cf *Mesobornia* group -

The "coral clam"  
in pockets in coral



see no - 28



"walking" surface

2112

3107

3101

2804

2803

2670

1595

1428

1205

1142

H.O.

(S.E. direction + ...)

Then back to Phuket - Butang by  
→ 10 + 11 Nov Penang - "Kail  
of Orient" - Supplies - back boat  
to Phuket via P. Sawhney for  
Census to Indonesia -  
→ station in deep water  
Kotakadja -  
Simoloe  
↓ Visor  
↓ Mentawi → Pater Id →  
Padang - supplies - 2 days →  
Sijunjung - South Pagi, Raja -  
Gado - then north - Sandang, N. M.  
Silent → Padang = 8/8 Dec -  
North - leaving Kotakadja Dec 24 -  
27 - arriving Colombo Dec 28

1963  
1927

Cyrtopoda to Sengajide

(Sunda Strait + Cyrtopoda - Krakatau)

H.O. Mayra Cruise A 1906



Then back to Phuket - Butang by

→ 10 + 11 Nov Penang - "Kail  
of Orient" - Supper - dock back  
to Phuket via P. Sankowice for  
dinner to Indonesia -  
→ station in deep water

Kotakadja -

16 Simoloe

17 Nias

18 Mentawi → Patu Id →

Padang - supper - 2 days →

Siggendo - South Pagi, Maja -

Gado

19 then north - Sandany N. M.  
Silent → Padang = 8/8 Dec. -

20 North - leaving Kotakadja Dec 24

22 - arriving Colombo Dec 28

1963

1927



See  
Oct 26 -

P. Bozar

P. ~~Hyse~~ Upch

Oct 27

↓ Cape Perbadan

tel 11

3.30 - 4.00 P.M. - mouth of Klang str

→ Pat Swettenham

Mon & Tues at → K.L.

Tues - weather by K.L. people

Tues night → Ids

P. Jarok = way out - jungle

↓ Pulau Perak - Perak 400' - 1000' offshore

= Bird Booby -

↓ Phuket - Thailand - Thai Seamount  
in Thai water

↓ North - Samilong Ids - Koh Sing Sa Kua  
northernmost Thai Id → Southwest of  
Mergui Bay

L

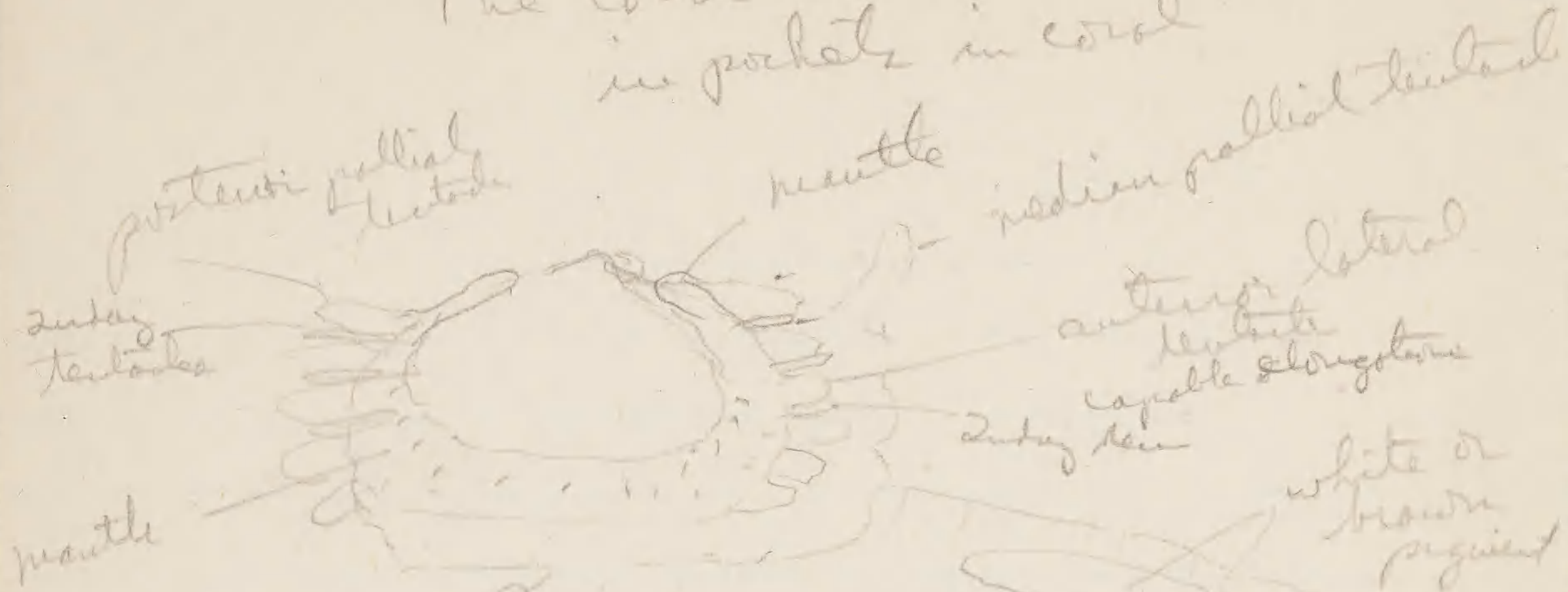


- H.O.
- 1142 (Sunda Strait & Approaches - Krakatoa)
- 1205 Approaches to Singapore
- 1428 Keppel Harbour (Singapore)
- 1594 Melaka Archipelago - by scale
- 1595 Straits of Malacca (old - small scale)
- 2670 Singapore Road
- 2803 Approaches to Penang) Hbr. (Str. of Malacca)
- 2804 Penang Hbr.
- 3101 N.W. Part Sumatra (by scale - Hoek's Rada)
- 3107 Padang region
- 3112 (S.E. Sumatra & Java Sea)
- 3120 Puket ("small" scale)
- 3121 N.W. Sumatra (incl. Simeulue)
- 3122 " " (incl. Nias)
- 3123 S.W. " (Siberut to Merga)
- 3124 " " " (Merga to Enggano, incl. Benkulen) + P. T. R. R.
- 3726 Puket Hbr.
- 3740 Port Swettenham & Cape Kuala Lumpur  
~~Cape Pahlado (Malacca Str.)~~
- 3743 Port Swettenham
- 3745 Cape Pahlado to Singapore
- 3746 South west of Singapore
- 3747 South of Singapore (by scale)
- 3748 Singapore Strait (W. part)
- 3749 " " (E. part)
- 3750 Strait of Johore (E. part)
- 3752 Singapore Straits - medium scale
- 3760 Puket - medium scale



cf. Nesbournia group -

The "coral clam"  
in pockets in coral



see no - 28

"walking" surface

